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To:	SpaceXBocaChica
Subject:	Comments on FAA Programmatic Environmental Assessment SpaceX
Date:	Friday, January 22, 2021 3:48:39 AM

To the FAA under the email address provided for public response.

Comments on FAA Programmatic Environmental Assessment SpaceX

I, Jamie Robinson, am a native Texan and grew up in the lower Rio Grande Valley area, mainly Brownsville. I spent alot of time enjoying Boca Chica Beach with friends and family. I have many concerns since SpaceX was permitted to build a testing launch facility in this location. Mainly, lack of access to a public beach, environmental impacts to both soil and ground water, along with air emissions, wildlife impacts to our Ecosystems and finally SpaceX not adhering to the terms in the July 2014 Record of Decision.

Because of my above concerns that I will address, I believe a new EIS should be conducted because the regulatory requirements for an **Environmental Impact Statement** are **more** detailed and rigorous **than** the requirements for an **Environmental Assessment**. And there are significant new circumstances and information relevant to the environmental effects that have bearing on the proposed action or its impacts relevant to SpaceX.

First, they exceeded the allotted time for closures which effected not only my access to enjoy the beach but other locals and tourists who intended on visiting and fishing the coastal waters. I am sure you will be receiving many comments on specific details on hours that SpaceX closed for testing, so I won't address the specifics.

I am very concerned on the impact to the soil and ground water at his launch site. On May 29, 2020, a SpaceX vehicle released LNG or propellant onto the launch surface. I understand that it exploded and possibly all the released propellant was burned. A robot dog was sent into the area after the fire was distinguished to verify levels for human contact and possible clean up. When vehicles explode, what air emissions are being released? Does SpaceX have equipment in place to measure these emissions? What effects to wildlife and humans if air emissions are released that exceed Federal standards. Has SpaceX tested the ground water for any impacts to to releases or explosions. Have they tested the soil around the launch area for impacts. A new EIS would address these concerns.

FYI the May 29th explosion was reported in a Reuters article:

Early indications were that an issue with the umbilical connections to the vehicle leaked significant quantities of propellant near the base of the vehicle.

SpaceX CEO Elon Musk later confirmed to Reuters reporter Joey Roulette that the problem was

related to the quick disconnect system

During the testing of the quick disconnects, the system malfunctioned – spilling large amounts of propellant. This could be seen during NASASpaceflight's live stream of the test.

The propellant eventually ignited, leading to a large explosion. It is not entirely clear what the ignition source was, but a still frame from the NASASpaceflight broadcast shows that the ignition occurred near the base of the vehicle.

My other concern are the areas that may be susceptible to future release and if those areas are lined, bermed or have sufficient containment area to prevent release of chemicals into the ground, ground water, Gulf of Mexico and Rio Grande. And what if a vehicle explodes outside the launch area. What impact to the environment will that entail. There are no assurances.

I wanted to let you know that SpaceX has not registered their Above Ground Tanks that have liquefied natural gas.(LNG) which is a petroleum product. **The gas** stream is typically separated into **the Liquefied Petroleum** fractions (butane **and** propane), which can be stored in **liquid** form at relatively low pressure, **and the** lighter ethane **and** methane fractions. These lighter fractions **of** methane **and** ethane are then **liquefied** to make up **the** bulk **of LNG.**

Also, I am concerned if the ASTs have containment built around them in case of leakage or spills. Based on drive bys, I could not confirm containment or berms around the ASTs. Another new consideration that was not in the July 2014 Record of Decision.

Artificial Lights

Next, SpaceX runs their operations 24/7. So at night there are very bright lights glaring on the Control Center and Launch site. This is a major concern that was not addressed in the July 2014 Record of Decision. The Glare from the lighting systems a SpaceX should be minimized for both the workers and any adjacent motorist. The glare should be considered from each direction and it seems to effect all approaching traffic on the roadway. The lighting should be at a downward angle. It also is effecting some of the residents homes which is effectively causing possible health issues due to no sleep because of the glare from the lighting at the Control Center.

According to OSHA Standards, illumination for General construction area is **5 foot-candles.** A foot candle (fc) is defined as unit of illumination that is equal to one lumen per square foot, or 10.764 lux. I believe this needs to addressed in a new EIS since again not considered in the July Record of Decision.

Artificial Lights Disrupt the World's Ecosystems

Birds that migrate or hunt at night navigate by moonlight and starlight. SpaceX artificial light or light pollution can cause them to wander off course and towards danger towards dangerous landscape. Migratory birds depend on cues from properly timed seasonal schedules. Artificial lights can cause them to migrate too early or too late and miss ideal climate conditions for nesting, foraging and other behaviors.

Nocturnal animals sleep during the day and are active at night. Light pollution radically alters their nighttime environment by turning night into day.

According to research scientist Christopher Kyba, for nocturnal animals, "the introduction of artificial light probably represents the most drastic change human beings have made to their environment."

"Predators use light to hunt, and prey species use darkness as cover," Kyba explains.

Glare from artificial lights can also impact wetland habitats that are home to amphibians such as frogs and toads, whose nighttime croaking is part of the breeding ritual. Artificial lights disrupt this nocturnal activity, interfering with reproduction and reducing populations. Again, another aspect to consider by conducting a more thorough EIS.

Artificial Lights Can Lead Baby Sea turtles to their Demise

Sea turtles live in the Gulf of Mexico but hatch at night on the beach. Hatchlings find the sea by detecting the bright horizon over the Gulf. Artificial lights draw them away from the Gulf. Another consideration for a thorough EIS.

Ecosystems: Everything is Connected

Many insects are drawn to light, but artificial lights can create a fatal attraction. Declining insect populations negatively impact all species that rely on insects for food or pollination. Some predators exploit this attraction to their advantage, affecting food webs in unanticipated ways.

I'm sure you will be receiving comments from the Texas Fish and Wildlife, so I shall endorse their concerns about the effects to the wildlife by the actions of SpaceX.

My last and biggest concern is the fact the SpaceX did not commit to the following requirement stated in the July Record of Decision concerning coordinating with Txdot to maintain clear shoulders on road edges to allow drivers to more easily see wildlife along the road edge and reduce potential incident of vehicle/wildlife collisions.

SpaceX and the local county sheriff department has allowed automobiles to park along the road edges in front of the Command Center for the last 3 years. At least 50 trucks and cars 24/7 are parked there to go work for SpaceX. I don't know if they are employees or contractors. But this specific directive in the July Record of Decision was not upheld. So what other directives in the July Record of Decision have not been adhered to by SpaceX.

Because of this lack of responsibility, a tractor trailer was parked on the road edge and partly in the lane near the Control Center in the dark and a family coming back from Boca Chica Beach collided into the commercial vehicle and the father was killed and the son possible paralyzed for life.

SpaceX is accountable for this incident and cars parked on the road edge because they are not providing enough parking within the facility for the workers or commercial vehicles with deliveries to be off the road edge. This is reckless and illegal conduct by SpaceX.

Thank you for your time and consideration of my concerns and I ask that you require an EIS be conducted because alot has changed since July 2014 now that SpaceX is in operation.

Regards,

Jamie Robinson
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